

FIGURE 1

AGGCCGTGCC	TATCCAGAAA	GTCCAGGATG	ACACCAAAAC	CCTCATCAAG	ACAATTGTCA
V P	I Q K	V Q D	D T K T	L I K	T I V
CCAGGATCAA	TGACATCTCA	CACACGCAGT	CCGTCTCCTC	CAAACAGAGG	GTCACTGGTT
T R I N	D I S	H T Q	S V S S	K Q R	V T G
TGGACTION	CCCTGGGCTC	CACCCTCTCC	TGAGTTTGTC	CAAGATGGAC	CAGACATTGG
L D F I	P G L	H P L	L S L S	K M D	Q T L
CGATCTACCA	ACAGATCCTC	ACCAGTCTGC	CTTCCAGAAA	TGTGGTCCAA	ATATCCAATG
A I Y Q	Q I L	T S L	P S R N	V V Q	I S N
ACCTGGAGAA	CCTCCGGGAC	CTTCTCCACC	TGCTGGCCGC	CTCCAAGAGC	TGCCCCTTGC
D L E N	L R D	L L H	L L A A	S K S	C P L
CGCAGGTCAG	GGCCCTGGAG	AGCTTGGAGA	GCTTGGGTGT	CGTCCTGGAA	GCCTCCCTCT
P Q V R	A L E	S L E	S L G V	V L E	A S L
ACTCCACCGA	GGTGGTGGCC	CTGAGCCGGC	TGCAGGGGTC	ACTACAGGAC	ATGTTGCGGC
Y S E E	V V A	L S R	L Q G S	L Q D	M L R
AGCTGGACCT	CAGCCCTGAA	TGCAGCGCT			
Q L D L	S P E	C			

FIGURE 2A

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Query:      1 AGGCCGTGCCTATCCAGAAAGTCCAGGATGACACCAAACCCTCATCAAGACAATTGTCA 60
            |||
Sbjct:     59 AAGCTGTGCCCATCCAAAAAGTCCAAGATGACACCAAACCCTCATCAAGACAATTGTCA 118
            |||

Query:     61 CCAGGATCAATGACATCTCACACACGCAGTCCGTCTCCTCCAAACAGAGGGTCACTGGTT 120
            |||
Sbjct:    119 CCAGGATCAATGACATTTACACACGCAGTCAGTCTCCTCCAAACAGAAAGTCACCGGTT 178
            |||

Query:     121 TGGACTTCATCCCTGGGCTCCACCCTCTCCTGAGTTTGTCCAAGATGGACCAGACATTGG 180
            |||
Sbjct:    179 TGGACTTCATTCTGCTGGGCTCCACCCCATCCTGACCTTATCCAAGATGGACCAGACACTGG 238
            |||

Query:     181 CGATCTACCAACAGATCCTCACCAGTCTGCCTTCCAGAAATGTGGTCCAAATATCCAATG 240
            |||
Sbjct:    239 CAGTCTACCAACAGATCCTCACCAGTATGCCTTCCAGAAACGTGATCCAAATATCCAACG 298
            |||

Query:     241 ACCTGGAGAACCTCCGGGACCTTCTCCACCTGCTGGCCGCCTCCAAGAGCTGCCCCCTTGC 300
            |||
Sbjct:    299 ACCTGGAGAACCTCCGGGATCTTCTTCACGTGCTGGCCTTCTCTAAGAGCTGCCACTTGC 358
            |||

Query:     301 CGCAGGTCAGGGCCCTGGAGAGCTTGGAGAGCTTGGGTGTCGTCCTGGAAGCCTCCCTCT 360
            |||
Sbjct:    359 CCTGGGCCAGTGGCCTGGAGACCTTGGACAGCCTGGGGGGTGTCTGGAAGCTTCAGGCT 418
            |||

Query:     361 ACTCCACCGAGGTGGTGGCCCTGAGCCGGCTGCAGGGGTCACTACAGGACATGTTGCGGC 420
            |||
Sbjct:    419 ACTCCACAGAGGTGGTGGCCCTGAGCAGGCTGCAGGGGTCTCTGCAGGACATGCTGTGGC 478
            |||

Query:     421 AGCTGGACCTCAGCCCTGAATGCAG 445
            |||
Sbjct:    479 AGCTGGACCTCAGCCCTGGGTGCTG 503
            |||

```

Query = bovine leptin cDNA
Sbjct = human leptin cDNA

FIGURE 2B

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Query:      1 AGGCCGTGCCTATCCAGAAAGTCCAGGATGACACCAAAACCCTCATCAAGACAATTGTCA 60
           |||
Sbjct:     59 AAGCAGTGCCTATCCAGAAAGTCCAGGATGACACCAAAACCCTCATCAAGACCATTGTCA 118
           |||

Query:      61 CCAGGATCAATGACATCTCACACACG 86
           |||
Sbjct:     119 CCAGGATCAATGACATTTACACACG 144
           |||

Query:      87 CAGTCCGTCTCCTCCAAACAGAGGGTCACTGGTTTGGACTTCATCCCTGGGCTCCACCCT 146
           |||
Sbjct:    1876 CAGTCGGTATCCGCCAAGCAGAGGGTCACTGGCTTGGACTTCATTCTGGGCTTCACCCC 1935
           |||

Query:     147 CTCCTGAGTTTGTCCAAGATGGACCAGACATTGGCGATCTACCAACAGATCCTCACCAGT 206
           |||
Sbjct:    1936 ATTCTGAGTTTGTCCAAGATGGACCAGACTCTGGCAGTCTATCAACAGGTCCTCACCAGC 1995
           |||

Query:     207 CTGCCTTCCAGAAATGTGGTCCAAATATCCAATGACCTGGAGAACCTCCGGGACCTTCTC 266
           |||
Sbjct:    1996 CTGCCTTCCCAAAATGTGCTGCAGATAGCCAATGACCTGGAGAACTCTCCGAGACCTCCTC 2055
           |||

Query:     267 CACCTGCTGGCCGCTCCAAGAGCTGCCCCCTTGCCGCAGGTCAGGGCCCTGGAGAGCTTG 326
           |||
Sbjct:    2056 CATCTGCTGGCCTTCTCCAAGAGCTGCTCCCTGCCTCAGACCAGTGGCCTGCAGAAGCCA 2115
           |||

Query:     327 GAGAGCTTGGGTGTGCTCCTGGAAGCCTCCCTCTACTCCACCGAGGTGGTGGCCCTGAGC 386
           |||
Sbjct:    2116 GAGAGCCTGGATGGCGTCCTGGAAGCCTCACTCTACTCCACAGAGGTGGTGGCTTTGAGC 2175
           |||

Query:     387 CGGCTGCAGGGGTCACTACAGGACATGTTGCGGCAGCTGGACCTCAGCCCTGAATGCAG 445
           |||
Sbjct:    2176 AGGCTGCAGGGCTCTCTGCAGGACATTCTTCAACAGTTGGATGTTAGCCCTGAATGCTG 2234
           |||

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Query = bovine leptin cDNA
Sbjct = murine leptin cDNA

FIGURE 3A

				10	20	30	—39
Clconl				VPIQKVQDDTKTLIKTIVTRINDISHTQSVSSKQ	RV	TGL	
Ob_Hum	MHWGTL	CGFLWL	WPYLFY	VQAVPIQKVQDDTKTLIKTIVTRINDISHTQSVSSKQ	KV	TGL	
	10	20	30	40	50	60	
	40	50	60	70	80	90	99
Clconl	DFIPGLHPLLSLSKMDQTLAIYQQILTS	PSRNVVQISNDLENLRDLLHLLAASKSCPLP					
Ob_Hum	DFIPGLHPILTLSKMDQTLAVYQQILTS	MPSRNVIQISNDLENLRDLLHVLA	FSKSCHLP				
	70	80	90	100	110	120	
	100	110	120	130	140		
Clconl	QVRALESLESLGVVLEASLYSTEVVALSR	LQGS	LQDMLRQDL	SPEC			
	:::						
Ob_Hum	WASGLETLDSLGGVLEASGYSTEVVALSR	LQGS	LQDMLWQDL	SPGC			
	130	140	150	160			

Clconl = predicted bovine leptin amino acid sequence
Ob Hum = human leptin amino acid sequence

FIGURE 3B

				10	20	30	39
Clcon1				VPIQKVQDDTKTLIKTIVTRINDISHTQSVSSKQRTGL			
Ob_Mou	MCWRPLCRFLWLWSYLSYVQAVPIQKVQDDTKTLIKTIVTRINDISHTQSVSAKQRTGL						
		10	20	30	40	50	60
	40	50	60	70	80	90	99
Clcon1	DFIPGLHPILLSLSKMDQTLAIYQQILTSLP SRNVVQISNDLENLRDLLHLLAASKSCPLP						
Ob_Mou	DFIPGLHPILSLSKMDQTLAVYQQVLTSLPSQNVLQIANDLENLRDLLHLLAFSKSCSLP						
		70	80	90	100	110	120
	100	110	120	130	140		
Clcon1	QVRALESLES LGVVLEASLYSTE VVALSR LQGS LQDMLRQLDLSPEC						
Ob_Mou	QTSG LQKPESLDGVLEASLYSTE VVALSR LQGS LQDILQQLDVSPEC						
		130	140	150	160		

Clcon1 = predicted bovine leptin amino acid sequence
Ob Mou = murine leptin amino acid sequence

FIGURE 4

1 VPIQKVQDDTKTLIKTIVTRINDISHTQSV 30

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FIGURE 5A

Query: 1 VPIQKVQDDTKTLIKTIVTRINDISHTQSV 30

Sbjct: 22 VPIQKVQDDTKTLIKTIVTRINDISHTQSV 51

Query = actual bovine leptin amino acid sequence
Sbjct = human leptin amino acid sequence

Query: 1 VPIQKVQDDTKTLIKTIVTRINDISHTQSV 30
Sbjct: 22 VPIQKVQDDTKTLIKTIVTRINDISHTQSV 51

FIGURE 5B

Query: 1 VPIQKVQDDTKTLIKTIVTRINDISHTQSV 30

Sbjct: 22 VPIQKVQDDTKTLIKTIVTRINDISHTQSV 51

Query = actual bovine leptin amino acid sequence

Sbjct = murine leptin amino acid sequence

FIG. 6

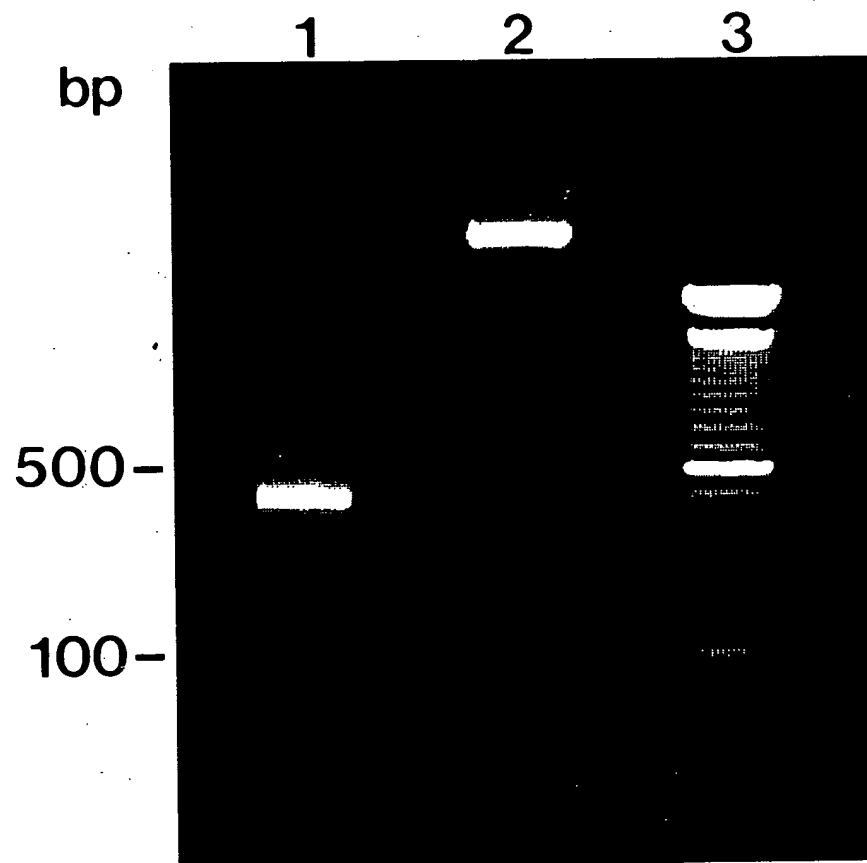
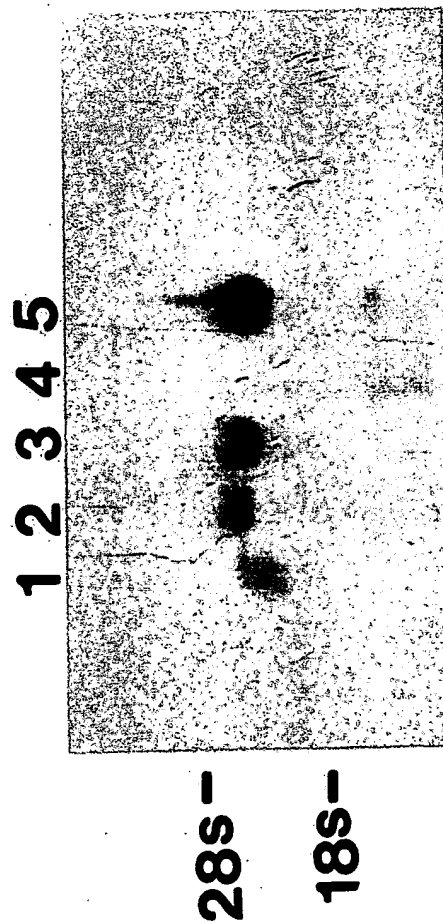


FIG. 7



100 200 300 400 500 600 700 800 900 1000

FIG. 8

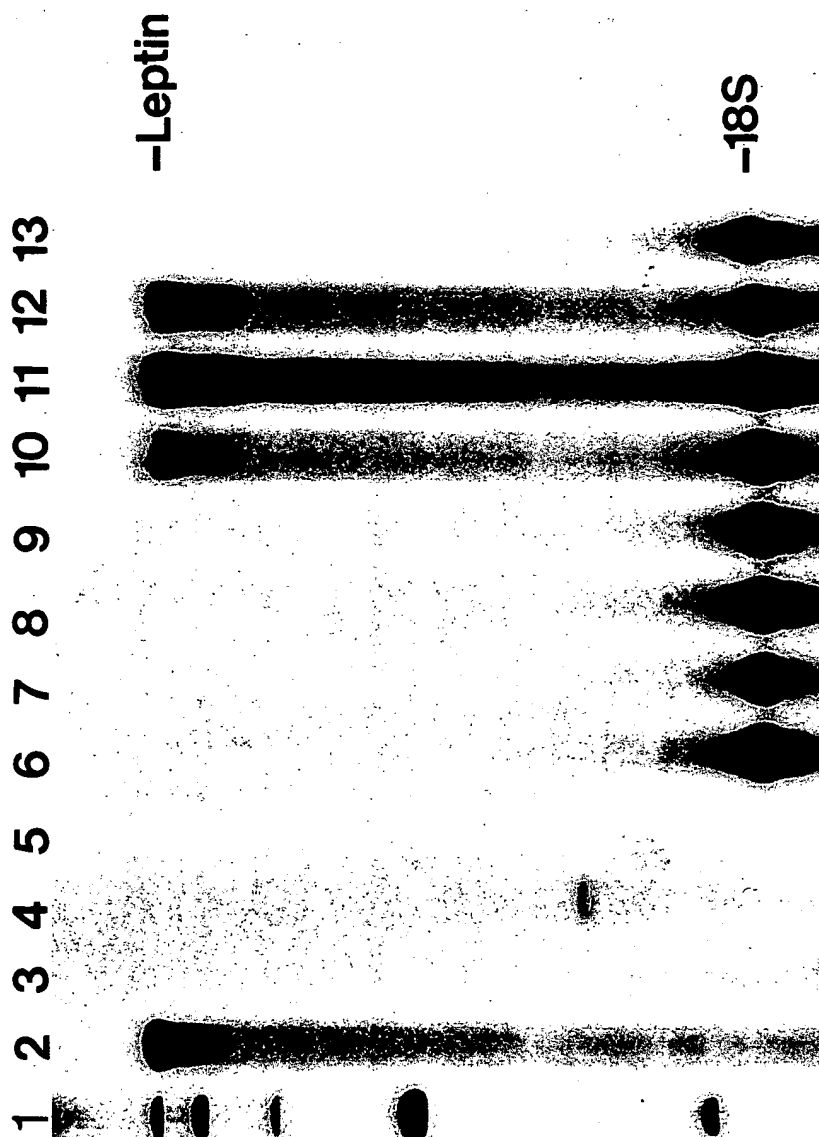


FIG. 9

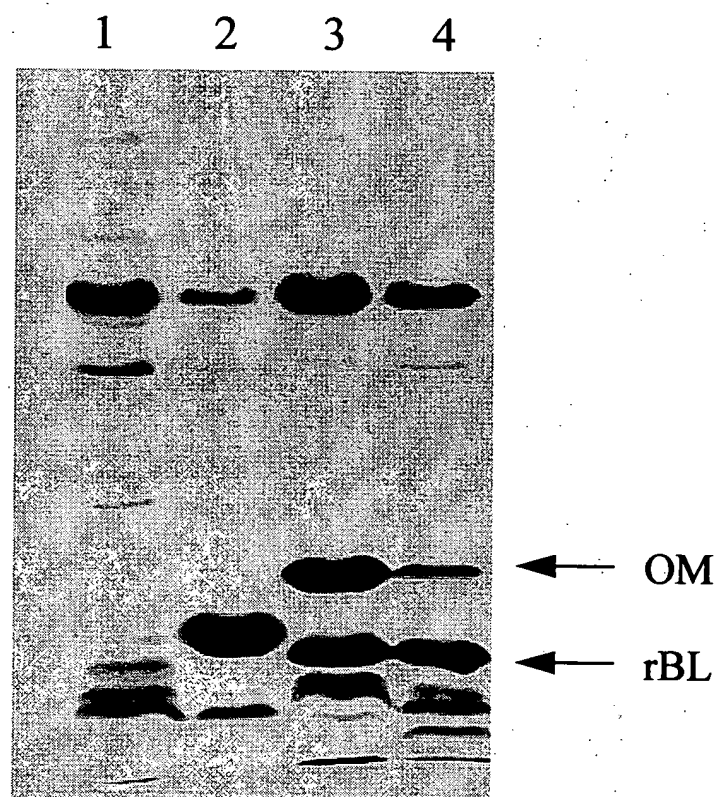


FIG. 10

1	VPIQKVQDDT	KTLIKTIIVTR	INDISHTQSV	SSKQRTGLD	40
	FIPGLHPLLS	LSKMDQTLAI	YQQILTSPLS	RNVVQISNDL	80
	ENLRDLLHLL	AASKSCPLPQ	VRALESLESL	GVVLEASLYS	120
	TEVVALSRlQ	GSLQDMLRQL	DLSPEC		146

FIG. 11A

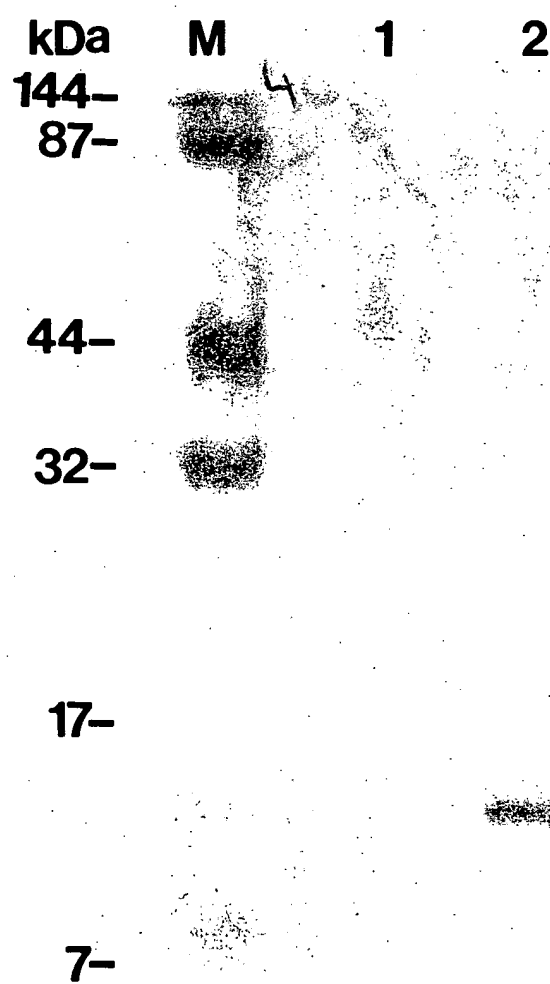


FIG. 11B

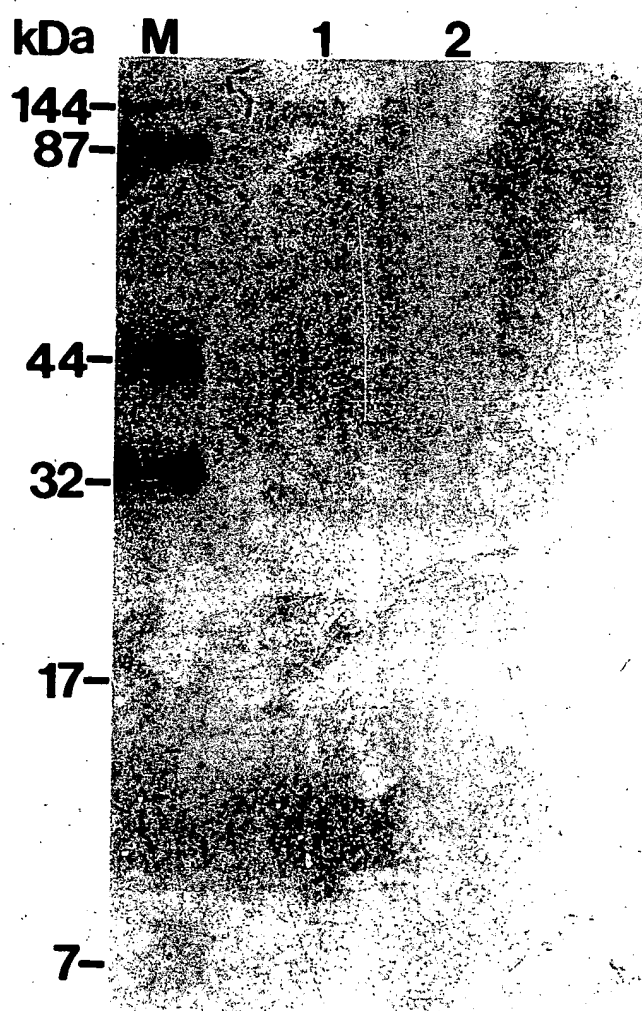


FIG. 12A

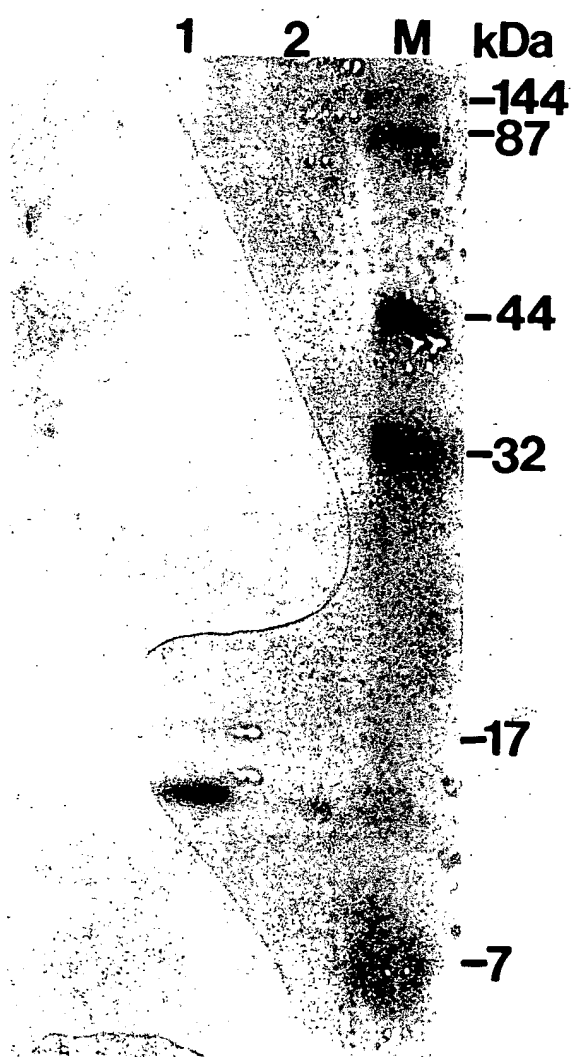


FIG. 12B

